

11. (New) The polynucleotide of claim 10, wherein mTll comprises the amino acid sequence selected from SEQ ID NO:3, SEQ ID NO:5, a functional domain of SEQ ID NO:3, and a functional domain of SEQ ID NO:5.

12. (New) The polynucleotide of claim 10, wherein the nucleotide sequence comprises SEQ ID NO:2, SEQ ID NO:4, a fragment of SEQ ID NO:2 encoding a functional domain of mTll, or a fragment of SEQ ID NO:4 encoding a functional domain of mTll.

13. (New) A cell comprising the polynucleotide of claim 10.

14. (New) The cell of claim 13, wherein the cell is a prokaryotic cell.

15. (New) The cell of claim 13, wherein the cell is a eukaryotic cell.

16. (New) A method for producing a polypeptide, the method comprising:
(a) culturing the cell of claim 13 under conditions suitable for expression of the polypeptide or a functional domain thereof; and
(b) isolating the polypeptide so expressed.

17. (New) A composition comprising mTll and at least one pharmaceutically acceptable excipient .

18. (New) The composition of claim 17, wherein mTll comprises the amino acid sequence selected from SEQ ID NO:3, SEQ ID NO:5, a functional domain of SEQ ID NO:3, and a functional domain of SEQ ID NO:5.

19. (New) A method for treating a condition or disorder associated with underexpression of mTll, the method comprising administering an effective amount of the composition of claim 17 to a patient in need.

20. (New) The method of claim 19, wherein the condition or disorder is selected from the group consisting of wound repair and osteogenesis.

21. (New) The method of claim 19, wherein the condition or disorder is associated with procollagen processing activity.

22. (New) The method of claim 19, wherein the condition or disorder is associated with laminin 5 processing activity.

BZ 23. (New) A method of cleaving a protein using mTll, the method comprising contacting a sample containing the protein with mTll under conditions suitable for cleavage of the protein.

24. (New) The method of claim 23, wherein mTll comprises the amino acid sequence selected from SEQ ID NO:3, SEQ ID NO:5, a functional domain of SEQ ID NO:3, and a functional domain of SEQ ID NO:5.

25. (New) The method of claim 23, wherein the protein is selected from the group consisting of procollagen and laminin 5.

26. (New) A method of identifying a compound that inhibits the activity of mTll, the method comprising:

- (a) measuring activity of mTll in the presence of the compound;
- (b) measuring activity of mTll in the absence of the compound;
- (c) comparing activity of mTll in the presence and absence of the compound, whereby a decrease in the activity of mTll in the presence of the compound indicates inhibition, thus identifying a compound that inhibits the activity of mTll.

27. (New) The method of claim 26, wherein mTll comprises the amino acid sequence selected from SEQ ID NO:3, SEQ ID NO:5, a functional domain of SEQ ID NO:3, and a functional domain of SEQ ID NO:5.

28. (New) A method for treating a condition or disorder associated with overexpression of mTll, the method comprising administering a compound identified by the method of claim 26 to a patient in need.

29. (New) The method of claim 28, wherein the condition or disorder is selected from the group consisting of fibrosis, scarring, keloids, and surgical adhesions.

30. (New) The method of claim 28, wherein the condition or disorder is associated with procollagen processing activity.

31. (New) The method of claim 28, wherein the condition or disorder is associated with laminin 5 processing activity.

32. (New) A method of inhibiting cleavage of a protein by mTll, the method comprising administering a compound identified by the method of claim 26 to a sample containing the protein and mTll.

33. (New) The method of claim 32, wherein the protein is selected from the group consisting of procollagen and laminin 5.